

Fig. 1

hlama5	MAKRLCAGSALCVRGPRGAPLLVGLLGAARAREAGGFSLHPFYFNLAEAGARIAASATCGSEAPARGSPRPTE	78
hlama5	DLVCKLVGGFVAGGDPNOTIRGQYCDICTAANSNAKAPASNAIDGTERWQSPPLSRGLYNEVNVTLDLGQVPHVAYVLIKANSPPRDLVLERSMDFGRTYQPHQFFASSKRDCLERPGPOTLEIRTRDDAAICTTEYSRIVPLENGEIVVSLVNGR	238
mlama5	DLVCKLVGGFVAGGDPNOTIRGQYCDICTAANSNAKAPASNAIDGTERWQSPPLSRGLYNEVNVTLDLGQVPHVAYVLIKANSPPRDLVLERSTDFGHTYQPHQFFASSKRDCLERPGPOTLEIRTRDDAAICTTEYSRIVPLENGEIVVSLVNGR	
hlama5	PGAMNFSYSPLIRREFTKATNRLRFLRNTLLSHLMKALRDPTVTRYYYSIKDISIGGRVCVGHADACDAKDPDLPRLQCTCOHNTCGTCDRCPPGFNOOPKATANSANECQSCNCHGHATDCYDPEVDRRRASQSLDGTQGGGVICDCH	398
mlama5	PGALNFSYSPLIRREFTKATNRLRFLRNTLLSHLMKALRDPTVTRYYYSIKDISIGGRVCVGHADACDAKDPDLPRLQCAQHNTCGGSCDRCCPGFNOOPKATANSANECQSCNCHGHATDCYDPEVDRRRASQSLDGTQGGGVICDCH	
sanger	HTAGVNCERCLPGFYRSPNHLDSFVCRRCNCBSDFDTGTCEDLTGRCYCRNPFSGRCDVCAGGTGFPSCYPTPS--SSNDTREQVLPAGQIVNCDCSAAGTCQNAKCRDPRVGRCLCKPNFQGTCELCAPGYGPGCCQCCSPGVADDRCDPDT	557
hlama5	HTAGVNCERCLPGFYRSPNHLDSFVCRRCNCBSDFDTGTCEDLTGRCYCRNPFSGRCDVCAGGTGFPSCYPTPS--SSNDTREQVLPAGQIVNCDCSAAGTCQNAKCRDPRVGRCLCKPNFQGTCELCAPGYGPGCCQCCSPGVADDRCDPDT	
mlama5	HTAGVNCERCLPGFYRSPNHLDSFVCRRCNCBSDFDTGTCEDLTGRCYCRNPFSGRCDVCAGGTGFPSCYPTPS--SSNDTREQVLPAGQIVNCDCSAAGTCQNAKCRDPRVGRCLCKPNFQGTCELCAPGYGPGCCQCCSPGVADDRCDPDT	
hlama5	GQCRVGVFEGATCDRCAPGYFHEPLCLQCCSPAGTLPBGCDERAGRLCQPEFAGPHCDRCRPGYHGFNQAQCTCDPRGALDQLCGAGLRCRPGYTGTAQCECSGPHGFPSCVPHCSAEGSLHAACDPRSGQCSRPRVTGLRCDTCVPGAYNF	717
mlama5	GQCMCRVGFEGATCDRCAPGYFHEPLCLQCCSPAGTLPBGCDERAGRLCQPEFAGPHCDRCRPGYHGFNQAQCTCDPRGALDQLCGAGLRCRPGYTGTAQCECSGPHGFPSCVPHCSAEGSLHAACDPRSGQCSRPRVTGLRCDTCVPGAYNF	
hlama5	PYCEAGSCHPAGLAPVDFALPBAQVPCMCRAHVGEPSCDRCCKPGWGLSPNPGECTRCSCLDRGLGVAECOPGTGCPCKPHVCGQACASCKDGPGLDOADYFGRCSCRCDDIGALGQSCPEPTGVCRPNTOGPTCEPARDHYLPDLHMLRLE	877
mlama5	PYCEAGSCHPAGLAPVDFALPBAQVPCMCRAHVGEPSCDRCCKPGWGLSPNPGECTRCSCLDRGLGVAECOPGTGCPCKPHVCGQACASCKDGPGLDOADYFGRCSCRCDDIGALGQSCPEPTGVCRPNTOGPTCEPARDHYLPDLHMLRLE	
hlama5	LEBAATPEGHAVRFGNPLEFENFSWRGYAQMVPQPRIVARINLTSPDLFWLVFRYVNRGMSVGRVSVREGRSAACANCTAQSOPVAFPPSTPEAFITVPORGFGPEFVLNPGTWALRVEAGVLDYVVLPSAYYEAALLQLRVTEACTYRPSA	1037
mlama5	LEBAATPEGHAVRFGNPLEFENFSWRGYAQMVPQPRIVARINLTSPDLFWLVFRYVNRGMSVGRVSVREGRSAACANCTAQSOPVAFPPSTPEAFITVPORGFGPEFVLNPGTWALRVEAGVLDYVVLPSAYYEAALLQLRVTEACTYRPSA	
hlama5	QSGDNCCLYTHLPDGFPSAAGLEALCRQDNLPRPCPTQLSPSPHPLITCTGSDVDVQLQVAVPQGRYALVVEYANEDARQEVGVAVHTPQAPQOGLLSLHPCLYSTLCRGATRDQDLAVPHLDSEASVRLTAQARFLHGVTLVPIEFSF	1197
mlama5	LHSTENCLVYALHLPDGFPSAAGLEALCRQDNLPRPCPTQLSPSPHPLITCTGSDVDVQLQVAVPQGRYALVVEYANEDARQEVGVAVHTPQAPQOGLLSLHPCLYSTLCRGATRDQDLAVPHLDSEASVRLTAQARFLHGVTLVPIEFSF	
hlama5	EFVPRVSVCSISSHGAPGMSAACLPSPFPKPPQPIILRDCQVILPLPGLPLTHAQDLTPATSPAGPRPRPTAVDPDASPTLLREPOATVVTTHVPTLGRYAFLLHGYOAPHTPFVEVLINAGRVWQHANASFCPHGYGCRTLVVECEQALLDVTHS	1357
mlama5	EFVPRVSVCSISSHGAPGMSAACLPSPFPKPPQPIILRDCQVILPLPGLPLTHAQDLTPATSPAGPRPRPTAVDPDASPTLLREPOATVVTTHVPTLGRYAFLLHGYOAPHTPFVEVLINAGRVWQHANASFCPHGYGCRTLVVECEQALLDVTHS	
hlama5	ELTVTVRVEGRWLDYVIVVPEVVSFGYLRBEPDLSYDFISHCAQGYHISPSSSSLPGRMAASLSLFPYNGARPCQCEVAGTGPCEPFGQGCPCAHVIGRDCSRCATGYWGFNCRPCDCGARLDELTCQCICPPRTIPEDCLLQOPOTF	1517
mlama5	ELTVTVRVEGRWLDYVIVVPEVVSFGYLRBEPDLSYDFISHCAQGYHISPSSSSLPGRMAASLSLFPYNGARPCQCEVAGTGPCEPFGQGCPCAHVIGRDCSRCATGYWGFNCRPCDCGARLDELTCQCICPPRTIPEDCLLQOPOTF	
hlama5	GCHPLVGCCECNCSCGPGQIELTDPCTDSDQCKRPNVTCRRCDTCSGPGEGYPRCRPCDCHAGTAPGVCDPLTQCYCKRIVQCKPCDQCSLOTPLDANPKGCTRCFCGATERCSCSSVTRQEFVDMGCVLLSTDRQVVPHEROPTMLEAD	1677
mlama5	GCHPLVGCCECNCSCGPGQIELTDPCTDSDQCKRPNVTCRRCDTCSGPGEGYPRCRPCDCHAGTAPGVCDPLTQCYCKRIVQCKPCDQCSLOTPLDANPKGCTRCFCGATERCSCSSVTRQEFVDMGCVLLSTDRQVVPHEROPTMLEAD	
hlama5	LRLHVEAPVFAFPELVYQAPPSYLGDRVSSYGGTLYELHSRTQGEVTVPMESRDPVVLQGNMSITPLEPAYPTPGHVHQQQLQVEGNFRHTENTNTVSRRELMVVLASLEQLRALFQISSAVSLRRVALEVASPAGOGALASNVBLCLCPASY	1837
mlama5	LR---SVADITSELYNQAPPYSLGDRVSSYGGTLYELHSRTQGEVTVPMESRDPVVLQGNMSITPLEPAYPTPGHVHQQQLQVEGNFRHTENTNTVSRRELMVVLASLEQLRALFQISSAVSLRRVALEVASPAGOGALASNVBLCLCPASY	
hlama5	RGSQCECAPGYRDKVGLFLGRVCVPCQCHGSDRLCPGSGVGVCDQHNTEGAHCRCQAGFMSSR-DDPSAPCVSCPCPLSVSPNFAEGCVLRGRTQCLCKPGYAGASCERCAPGFFGNPLVLGSSQPCDCSCNGDPMNLLFSDCPLTGACRCGLR	1996
mlama5	RGSQCECAPGYRDKVGLFLGRVCVPCQCHGSDRLCPGSGVGVCDQHNTEGAHCRCQAGFMSSR-DDPSAPCVSCPCPLSVSPNFAEGCVLRGRTQCLCKPGYAGASCERCAPGFFGNPLVLGSSQPCDCSCNGDPMNLLFSDCPLTGACRCGLR	
hlama5	HTGPRCICAPGYGNALLPGNCTRCDCPTGCTEACDPHSGHCLKAGVTRGRCDRCQEGHGFNGCGGCRPACGPAAGSECHPGSGQCHCRPGTWGPGQRCAPGYWGLPEQGCRCRCQCGRCDPHTGRCNCPGLSGERCDTCSQHQVFPVPG	2156
mlama5	HTGPRCICAPGYGNALLPGNCTRCDCPTGCTEACDPHSGHCLKAGVTRGRCDRCQEGHGFNGCGGCRPACGPAAGSECHPGSGQCHCRPGTWGPGQRCAPGYWGLPEQGCRCRCQCGRCDPHTGRCNCPGLSGERCDTCSQHQVFPVPG	
hlama5	PVGHSHCEVCDHCVLLDDLERAGALLPAIEHQGLGINSAMARLHRLNASTADLSQSLRPLGPRHETAQQLLEVLEQSTSLQDARLGGQAVGTDRDQASQLLACTEATLGHAKTLAAITRAVDRTLSLMSQTHGLGLANASAPSGEQLRTL	2316
mlama5	PVGHSHCEVCDHCVLLDDLERAGALLPAIEHQGLGINSAMARLHRLNASTADLSQSLRPLGPRHETAQQLLEVLEQSTSLQDARLGGQAVGTDRDQASQLLACTEATLGHAKTLAAITRAVDRTLSLMSQTHGLGLANASAPSGEQLRTL	
hlama5	AEVERLLWEMRARDLGAPAAAEABLAARLLARVQBSLSSWEENQALATQTRDLAQHEAGLMDLREALNRAVDATREAEQELNSRQERLEALQKQELSRDNATLQATLHAARDTLASVFLHLSLDOAKESLERLAASLDGARTPLLRQMOTFS	2476
mlama5	AEVERLLWEMRARDLGAPAAAEABLAARLLARVQBSLSSWEENQALATQTRDLAQHEAGLMDLREALNRAVDATREAEQELNSRQERLEALQKQELSRDNATLQATLHAARDTLASVFLHLSLDOAKESLERLAASLDGARTPLLRQMOTFS	
hlama5	PAGSLRLVEAEAAHQQLQALNLSIIILDVNDRLTORAIBASNAYSRILOAVQAEDAAQALQQAADHTWATVVRQGLVDRAQQLANSTALEBAMLEQEQRLGLVMAALOGARTQLRDVRANKQDLBAHQAAQAMLMDTETSSEKIAHAKAVA	2636
mlama5	PAGSLRLVEAEAAHQQLQALNLSIIILDVNDRLTORAIBASNAYSRILOAVQAEDAAQALQQAADHTWATVVRQGLVDRAQQLANSTALEBAMLEQEQRLGLVMAALOGARTQLRDVRANKQDLBAHQAAQAMLMDTETSSEKIAHAKAVA	
hlama5	AEADTATRVQSOLOANQENVERWQGYEGLRQDLQAVLDAGHSVSTLEKTLPLQAKLSILENRGVNASLASASIGRVELIAQARGAASKVKVPMKFNRSQVGLRTPRDLADLAAYTALKPYLOG--PEPEPGQGTEDRFVNMVMSRQATGDY	2794
mlama5	AEADTATRVQSOLOANQENVERWQGYEGLRQDLQAVLDAGHSVSTLEKTLPLQAKLSILENRGVNASLASASIGRVELIAQARGAASKVKVPMKFNRSQVGLRTPRDLADLAAYTALKPYLOG--PEPEPGQGTEDRFVNMVMSRQATGDY	
hlama5	MGVSLRDKVHVNYVQLGEAGPAVLSIDEDIGEPAVSLDRLTQFGHMSVTVRQMIQETKQDTPAGAEGLNLRPDDFVYVGGYPTFTPPPLLRFPYGRGCIEMDTLNEBVVSLYNFERTFOLDTAVDRPCARSKSTGDPMLTDSYLDGTGFARI	2954
mlama5	MGVSLRDKVHVNYVQLGEAGPAVLSIDEDIGEPAVSLDRLTQFGHMSVTVRQMIQETKQDTPAGAEGLNLRPDDFVYVGGYPTFTPPPLLRFPYGRGCIEMDTLNEBVVSLYNFERTFOLDTAVDRPCARSKSTGDPMLTDSYLDGTGFARI	
hlama5	SFDSQISTTKRFEQELRLVSYSGVLFLLKQSSQFLCLAVQEGSLVLLYDFGAGLKKAVLPQPPPLTSASKAIQVFLGGSRKVLVVRERATVVSVEQNDLELADAYLGGVPPDQLPPLSLRMLFPPTGGSVRGCVKGIKALGKYVDLKRNTTGVASG	3114
mlama5	SFDSQISTTKRFEQELRLVSYSGVLFLLKQSSQFLCLAVQEGSLVLLYDFGAGLKKAVLPQPPPLTSASKAIQVFLGGSRKVLVVRERATVVSVEQNDLELADAYLGGVPPDQLPPLSLRMLFPPTGGSVRGCVKGIKALGKYVDLKRNTTGVASG	
hlama5	CTADILLVGRAMTFHGHFLRLALSNAVPLTGNVYSGFGFHSQASALLYYRASPDGLQVSLQOQVSLQLLRTVEVTKQAGPADGAPHYVAFYNATGVWLYVDDQLQOMKPHRGPPPELOPQPEGPPRLLLGGLPSSGTIYNFSGCISNVFVORLLGPO	3274
mlama5	CTADILLVGRAMTFHGHFLRLALSNAVPLTGNVYSGFGFHSQASALLYYRASPDGLQVSLQOQVSLQLLRTVEVTKQAGPADGAPHYVAFYNATGVWLYVDDQLQOMKPHRGPPPELOPQPEGPPRLLLGGLPSSGTIYNFSGCISNVFVORLLGPO	
hlama5	RVFDLQNLGSSVNVSTGCAPALQACTPGGLPRGLQATARKASRRSRQPARHPACMLPPHKLTRDSYQPGSSLSHLEFVGIILARHNRNPSLSMHVLPSS--SRGILLFTARLRPGSPSLALFLSNHGFVAQMBGLGTLRAQSRQSRPGRWVKVSRWE	3433
mlama5	RVFDLQNLGSSVNVSTGCAPALQACTPGGLPRGLQATARKASRRSRQPARHPACMLPPHKLTRDSYQPGSSLSHLEFVGIILARHNRNPSLSMHVLPSS--SRGILLFTARLRPGSPSLALFLSNHGFVAQMBGLGTLRAQSRQSRPGRWVKVSRWE	
hlama5	KNRILLVTDGARAWSQEGPHRCHQAEHPQHTLFGVGLPASSHSSKLVTVGFGSGCVKRLRLHGRPLCAPTRMAGVTPCLGLPLEAGLFPQSGGVITLDLPGLATLPDVGLELVRPLAVTGLIHLGQARTPPYLOLVTEKQVLLRADDGAGEFSTS	3593
mlama5	KNRILLVTDGARAWSQEGPHRCHQAEHPQHTLFGVGLPASSHSSKLVTVGFGSGCVKRLRLHGRPLCAPTRMAGVTPCLGLPLEAGLFPQSGGVITLDLPGLATLPDVGLELVRPLAVTGLIHLGQARTPPYLOLVTEKQVLLRADDGAGEFSTS	
hlama5	VTRPSVLCDGQNHRLAVMKSNGVLRLEVDASNHTVGPLLAAAAGAPAPLYLGLPEPMAVQPMPPAYCGNRLAVNRSPVAMTRSVSEVHGAVGASGCPAA	3695
mlama5	VTRPSVLCDGQNHRLAVMKSNGVLRLEVDASNHTVGPLLAAAAGAPAPLYLGLPEPMAVQPMPPAYCGNRLAVNRSPVAMTRSVSEVHGAVGASGCPAA	

Fig. 2

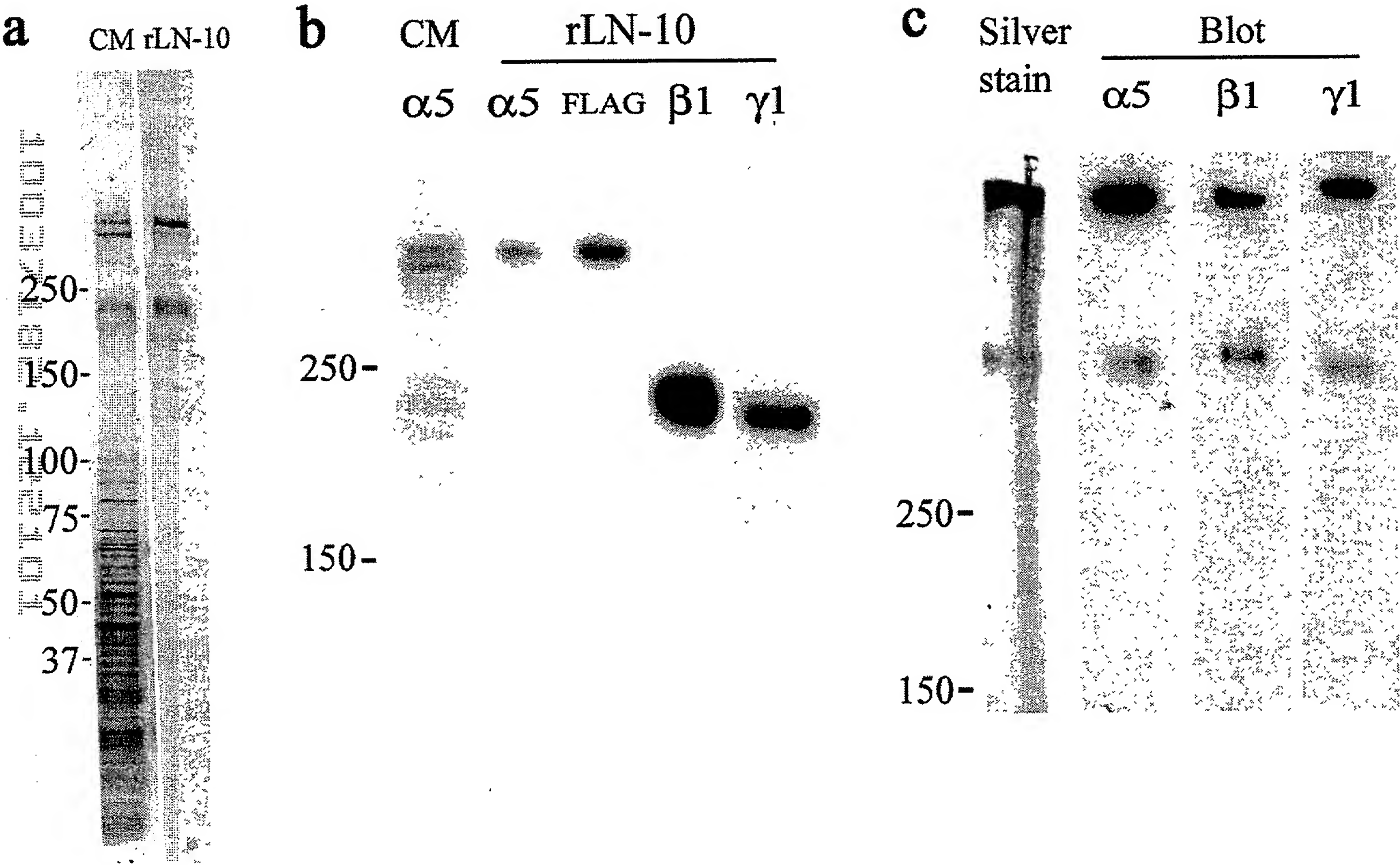


Fig. 4³

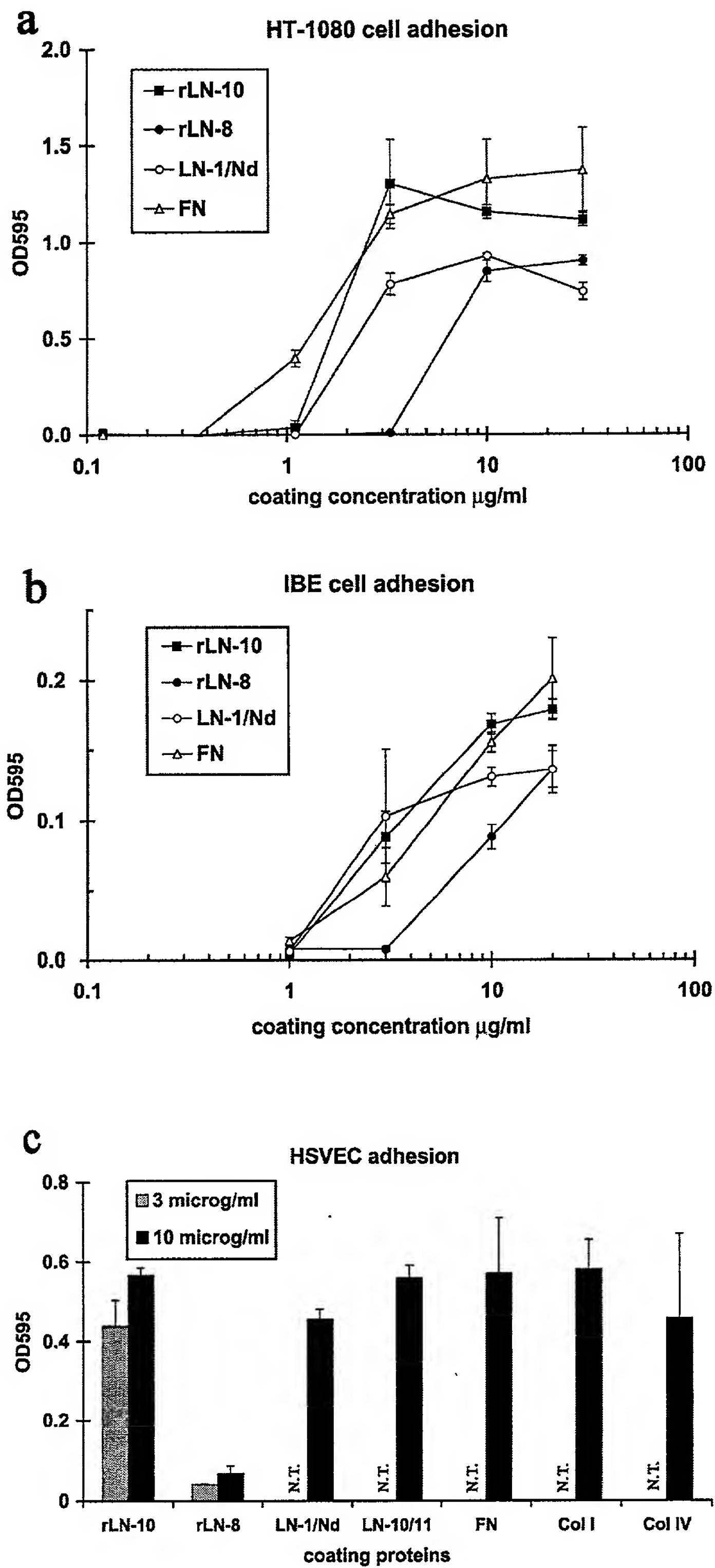
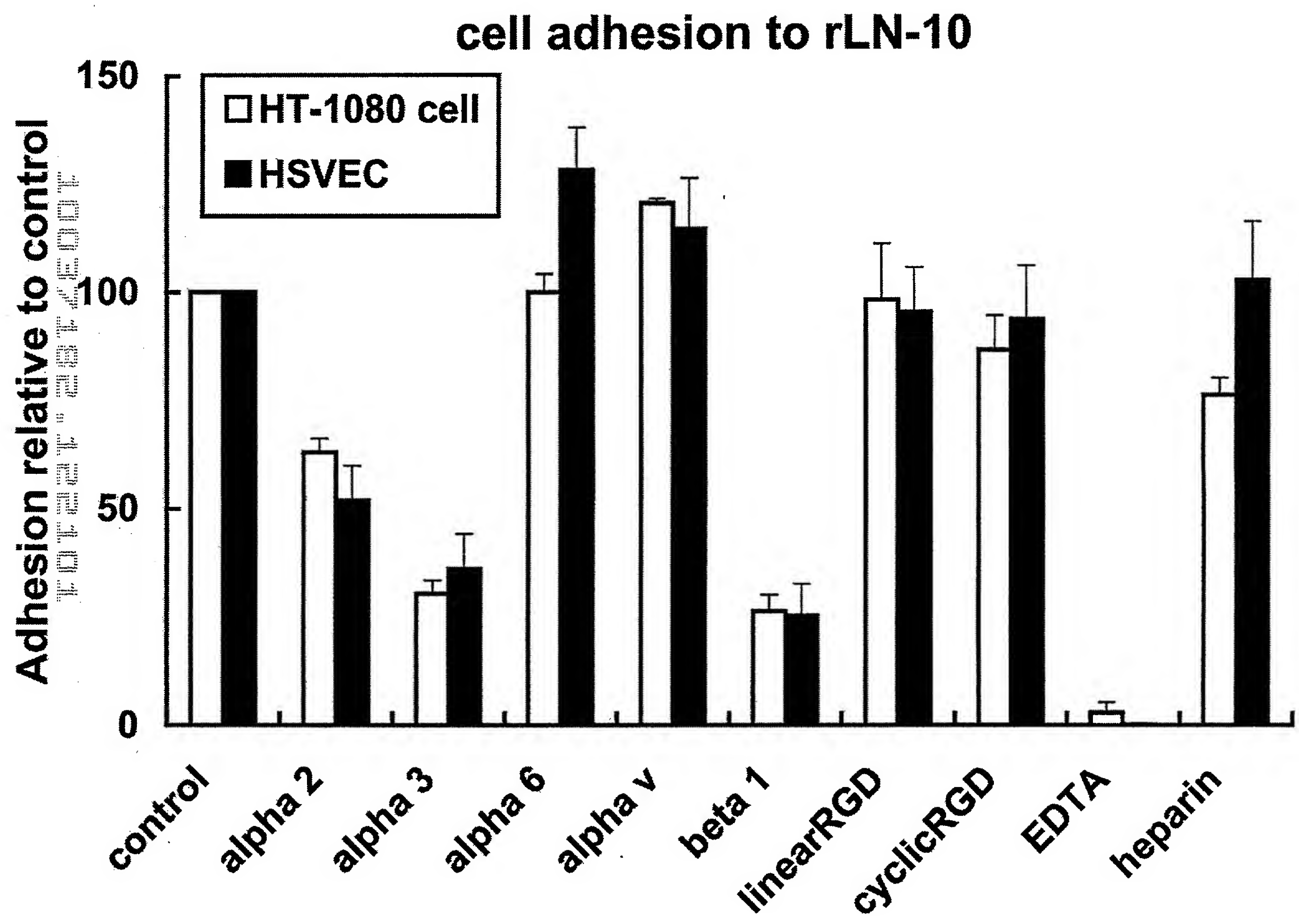


Fig. 6⁴



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